

Statement of Considerations

REQUEST BY ARTHUR D. LITTLE, INC., FOR AN ADVANCE
WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT
INVENTIONS MADE IN THE COURSE OF OR UNDER DEPARTMENT
OF ENERGY COOPERATIVE AGREEMENT DE-FC21-94MC31260; DOE
WAIVER DOCKET W(A)-94-005 [ORO-570]

Arthur D. Little, Inc. (ADL), on behalf of itself and its project team members, has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under U. S. Department of Energy (DOE) Cooperative Agreement DE-FC21-94MC31260. The work is sponsored by the Office of Fossil Energy.

On July 6, 1992, DOE solicited proposals through a Project Opportunity Notice for a fifth round of Clean Coal Technology (CCT) contracts. The CCT Program's objective is to conduct cost-shared demonstration projects that advance significantly the efficiency and environmental performance of coal-using technologies and that are applicable to either new or existing facilities. DOE shares not more than 50% of the cost, all of which is to be repaid from the commercialization of the technology. DOE sees its financial role as assisting private sector projects, not supporting research activities nor replicating technologies that are commercially available.

In order for the commercialization that supports the repayment to be successful, the winning proposers have an opportunity to request a waiver of Government-held patent rights which, if approved, would allow them to fully commercialize inventions that may arise during the course of the demonstration project. ADL's proposal was successful, commercialization and repayment plans have been submitted, and a contract has been negotiated and is ready to be executed. Accordingly, the waiver request has been reviewed and evaluated based on the considerations contained in this document.

The scope of the work calls for the design, manufacture, installation, operation and analysis of an advanced, coal-fueled diesel engine at Easton Utilities in Maryland. The dollar amount of the Cooperative Agreement is about \$37.3 million with the project team cost sharing at least 50% of that amount. ADL will sign a repayment agreement that will provide that they will repay DOE, out of commercialization income, DOE's share within 20 years after the end of the demonstration period.

Although ADL is the signatory to the Cooperative Agreement and the repayment agreement, it is submitting this waiver petition on its own behalf and on behalf of and with the permission of its project team members, Cooper-Bessemer Reciprocating Products Division of Cooper Industries (Cooper-Bessemer) and AMBAC International (AMBAC), subcontractors under the Cooperative Agreement. Letters from Cooper-Bessemer and AMBAC have been delivered to DOE, expressly stating this permission. Terms of the subcontracts between ADL and subcontractors Cooper-Bessemer and AMBAC will provide for transfer of title to inventions made by Cooper-Bessemer and AMBAC from ADL to Cooper-Bessemer and AMBAC, respectively.

ADL is a diversified research, development, engineering and consulting firm and will act as the project manager and a resource for the subcontractors. However, it is not anticipated that ADL will make any inventions under the Cooperative Agreement. In their role they will design, fabricate and install an emissions control system, assess performance of the coal-diesel engines, monitor and replace engine components, update the commercialization plan, handle environmental monitoring, and prepare and deliver all necessary progress reports to DOE.

AMBAC (and predecessors) has been a leading supplier of fuel injection equipment since the early 1900s. Its products are used in every segment of the diesel fuel injection industry, ranging from stationary stations to locomotives to over-the-road trucks to military and agricultural equipment. It holds many patents in the field including one that will be used in this demonstration project. It has a history of investing its own resources to develop, test, manufacture and introduce high pressure fuel injection equipment for the Coal-Water-Slurry Program and will invest about \$350,000 of its own money in this project. Therefore, AMBAC's experience and expertise will contribute substantially to commercialization of the inventions made under the Cooperative Agreement.

Cooper-Bessemer has been working on a cost-shared basis on DOE-sponsored research and component development projects to operate a diesel engine on coal fuel since 1985. It is a leader in the field of large diesel, natural gas and dual-fuel engines and manufactures both 2-cycle and 4-cycle engines. Cooper-Bessemer will invest over \$1.5 million over the duration of the project and is foregoing a fee under the Cooperative Agreement. Cooper-Bessemer's experience and expertise will contribute substantially to commercialization of the inventions made under the Cooperative Agreement.

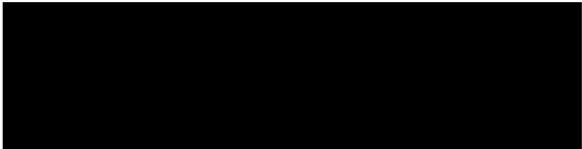
ADL has submitted a commercialization plan for the novel coal diesel engine technology. It has also submitted letters of commitment from Cooper-Bessemer and AMBAC stating that they have placed high priority on commercialization efforts.

A patent rights clause embodying waiver terms and conditions, including march-in rights, U.S. Competitiveness, retention by the Government of a license and preference for U.S. industry clauses is a part of the Cooperative Agreement to be signed by ADL. These patent and data clauses will be put in the subcontracts including a paragraph that limits contractor's and subcontractors' ability to alienate waived rights. Specifically, they shall not transfer rights in any invention without prior approval of DOE. Also, should there be a change in ownership of the contractor or either subcontractor, rights in inventions will be suspended until approval by DOE of the entity obtaining controlling interest having the waiver.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace; therefore, there should not be undue market concentration of ADL, AMBAC or Cooper-Bessemer products.

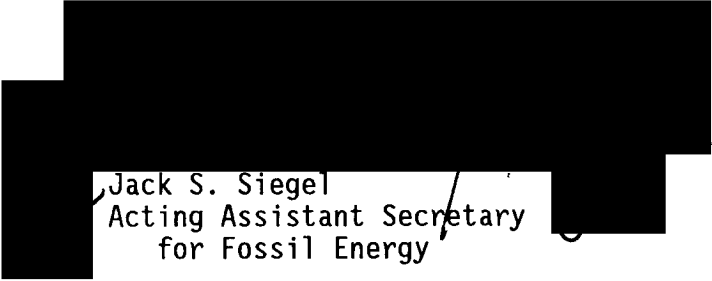
Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the acceptable level of cost sharing by ADL and its subcontractors, the repayment agreement, the commitment to commercialize and the objectives and considerations set forth in DOE PR 9-9.109, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.

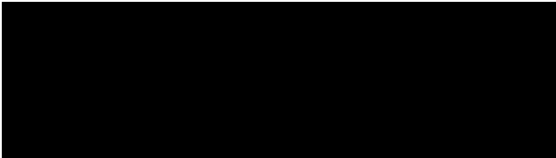

Katherine Lovingood
Senior Patent Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared Cooperative Agreement where, through such a modification or extension, the purpose, scope or cost of the Agreement has been substantially altered.

CONCURRENCE:


Jack S. Siegel
Acting Assistant Secretary
for Fossil Energy

APPROVAL:


Robert M. Poteat
Acting Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date:

7-8-94

Date:

7/8/94

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WAIVER ACTION ABSTRACT

<u>REQUESTOR</u>	<u>CONTRACT SCOPE OF WORK</u>	<u>RATIONALE FOR DECISION</u>	<u>DISPOSITION</u>
Arthur D. Little, Inc	To build an advanced coal-fueled diesel engine as part of DOE's Clean Coal Program.	ADL agree to a minimum 50% cost sharing and to repay the government contribution. They also commit to commercialize the technology. ADL's project team has the experience and ability to make clean coal technology development and commercialization of inventions a success.	Grant Waiver